Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|--------------------|
| NATURE OF CONVEYANCE: | Security Agreement |

CONVEYING PARTY DATA

| Name | Formerly | Execution Date | Entity Type |
|----------------------------------|-------------------------------------|----------------|---------------------------|
| PULSE ELECTRONICS CORPORATION | | 10/14/2011 | CORPORATION: PENNSYLVANIA |
| IIPLIESE ELECTRONICS INC | FORMERLY PULSE ENGINEERING, INC. | 10/14/2011 | CORPORATION: DELAWARE |

RECEIVING PARTY DATA

| Name: | JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE AGENT |
|-----------------|--|
| Street Address: | 270 PARK AVENUE |
| City: | NEW YORK |
| State/Country: | NEW YORK |
| Postal Code: | 10017 |
| Entity Type: | ASSOCIATION: UNITED STATES |

PROPERTY NUMBERS Total: 11

| Property Type | Number | Word Mark |
|----------------------|----------|-------------------------------|
| Registration Number: | 1803124 | VALOR |
| Registration Number: | 2410114 | Z-BLOCKER |
| Registration Number: | 1921738 | COPPERHEAD |
| Registration Number: | 2441051 | COMPONENTS FOR A MODERN WORLD |
| Serial Number: | 85171998 | |
| Serial Number: | 85376672 | MAGPAC |
| Serial Number: | 85172007 | PULSE ELECTRONICS |
| Serial Number: | 85291715 | SIDEWINDER |
| Serial Number: | 75709982 | EXCELSUS |
| Serial Number: | 77434243 | PULSE |
| Serial Number: | 77434185 | PULSE |

Fax Number: (866)826-5420 Phone: 301-638-0511 Email: ipresearchplus@comcast.net Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail. Correspondent Name: IP Research Plus, Inc. Address Line 1: 21 Tadcaster Circle Address Line 2: attn: Penelope J.A. Agodoa Waldorf, MARYLAND 20602 Address Line 4: 37447 ATTORNEY DOCKET NUMBER: NAME OF SUBMITTER: Penelope J.A. Agodoa Signature: /pja/ Date: 10/26/2011 Total Attachments: 12 source=37447#page1.tif source=37447#page2.tif source=37447#page3.tif source=37447#page4.tif source=37447#page5.tif source=37447#page6.tif source=37447#page7.tif source=37447#page8.tif source=37447#page9.tif

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PATENT AND TRADEMARK SECURITY AGREEMENT dated as of October 14, 2011 (this "Agreement"), among Pulse Electronics Corporation (formerly known as Technitrol, Inc.) (the "Company"), the Subsidiaries party hereto (the "Subsidiary Grantors" and, collectively with the Company, the "Grantors") and JPMORGAN CHASE BANK, N.A. ("JPMCB"), as Administrative Agent.

Reference is made to (a) the Credit Agreement dated as of February 28, 2008, as amended and restated as of February 19, 2009 and as further amended and restated as of August 5, 2011, (as amended, supplemented or otherwise modified from time to time, the "Credit Agreement"), among the Company, the Lenders party thereto and JPMCB, as Administrative Agent, the Swing Line Lender and an L/C Issuer, and (b) the Domestic Collateral Agreement dated as of February 19, 2009 (as amended, supplemented or otherwise modified from time to time, the "Domestic Collateral Agreement"), among the Company, the Subsidiaries of the Company party thereto and JPMCB, as Administrative Agent (the "Administrative Agent"). The Lenders have heretofore extended credit to the Borrowers under the Credit Agreement, and the Lenders and the L/C Issuers have agreed to extend additional credit to the Borrowers under the Credit Agreement. The Grantors have entered into this Agreement in order to induce the Lenders and the L/C Issuers to make certain accommodations under the Credit Agreement and to continue to extend credit to the Borrowers. The obligation of the Lenders and the L/C Issuers to make such accommodations, and to continue to extend such credit, are conditioned upon, among other things, the execution and delivery of this Agreement. The Subsidiary Grantors are or are Affiliates of the Borrowers, will derive substantial benefits from such accommodations under the Credit Agreement and the extension of credit to the Borrowers pursuant to the Credit Agreement and are willing to execute and deliver this Agreement in order to induce the Lenders and the L/C Issuers to make additional extensions of credit under the Credit Agreement and as consideration for such extensions of credit and other accommodations under the Credit Agreement previously made. Accordingly, the parties hereto agree as follows:

SECTION 1. <u>Defined Terms.</u> Capitalized terms used in this Agreement and not otherwise defined herein have the meanings specified in the Domestic Collateral Agreement. The rules of construction specified in Section 1.02 of the Credit Agreement also apply to this Agreement, mutatis mutandis.

SECTION 2. Grant of Security Interest. As security for the payment or performance, as the case may be, in full of the Secured Obligations, each of the Grantors, pursuant to the Domestic Collateral Agreement, did and hereby does grant to the Administrative Agent, its successors and permitted assigns, for the benefit of the Secured Parties, a security interest in, all right, title and interest in and to any and all of the following assets and properties now owned or at any time hereafter acquired by such Grantor or in which such Grantor now has or at any time in the future may acquire any right, title or interest (collectively, the "Patent and Trademark Collateral"):

[[3308513]]

- (a) all letters patent of the United States, all registrations and recordings thereof, and all applications for letters patent of the United States, including registrations, recordings and pending applications in the United States Patent and Trademark Office, including those registered Patents (as defined in the Domestic Collateral Agreement) and Patent applications listed on <u>Schedule I</u> (the "Patents");
- (b) all reissues, continuations, divisions, continuations-in-part, renewals or extensions thereof, and the inventions disclosed or claimed therein, including the right to make, use and/or sell the inventions disclosed or claimed therein;
- (c) all trademarks, service marks, trade names, corporate names, company names, business names, fictitious business names, trade styles, trade dress, logos, other source or business identifiers, designs and general intangibles of like nature, now existing or hereafter adopted or acquired, all registrations and recordings thereof, and all registration and recording applications filed in connection therewith, including registrations and registration applications in the United States Patent and Trademark Office or any similar offices in any State of the United States, and all extensions, or renewals thereof, including those United States registered Trademarks (as defined in the Domestic Collateral Agreement) and Trademark applications listed on Schedule II (the "Trademarks");
- (d) all goodwill associated with the Trademarks or symbolized thereby; and
- (e) all other assets, rights and interests that uniquely reflect or embody such goodwill.

SECTION 3. <u>Domestic Collateral Agreement</u>. The security interests granted to the Administrative Agent herein are granted in furtherance, and not in limitation of, the security interests granted to the Administrative Agent pursuant to the Domestic Collateral Agreement. Each Grantor hereby acknowledges and affirms that the rights and remedies of the Administrative Agent with respect to the Patent and Trademark Collateral are more fully set forth in the Domestic Collateral Agreement, the terms and provisions of which are hereby incorporated herein by reference as if fully set forth herein. In the event of any conflict between the terms of this Agreement and the Domestic Collateral Agreement, the terms of the Domestic Collateral Agreement shall govern.

SECTION 4. Governing Law. This Agreement shall be construed in accordance with and governed by the law of the State of New York.

[[3308513]]

IN WITNESS WHEREOF, the parties hereto have duly executed this Patent and Trademark Security Agreement as of the day and year first above written.

PULSE ELECTRONICS CORPORATION,

By

Name: Drew A. Moyer

Title: Senior VP and CFO

PULSE ELECTRONICS, INC.,

Ву

Name: Drew A. Moyer

Title: Secretary & Treasurer

TECHNITROL DELAWARE, INC.,

By

Name: Drew A. Moyer

Title: President

JPMORGAN CHASE BANK, N.A., as Administrative Agent, on behalf of itself and the other Secured Parties,

ву

Name: Title:

Deborah R. Winkler Vice President

[[3308513]]

SCHEDULE 1

| Patent or Application # | Owner of Patent | Title | Patent Granted (countries) | Patent Apps Pending (countries) | Patent Grant Date | Patent Expiration Date |
|----------------------------|---|--|----------------------------|---------------------------------|----------------------|---------------------------|
| 61/413,913 | Pulse Engineering, Inc. | Advanced Electronic Header Apparatus and Methods | | US | None | None |
| 12/012,157 | Pulse Engineering, Inc. | Self-Leaded Surface Mount Inductors and Methods | | US | None | None |
| 12/567,622 | Pulse Engineering, Inc. | Current Sensing Devices and Methods | | US, PCT, TW | None | None |
| 12/684,056 | Pulse Engineering, Inc. | Current Sensing Devices and Methods | | US, PCT, TW | None | None |
| 12/954,546 | Pulse Engineering, Inc. | Current Sensing Devices and Methods | | US, PCT, TW | None | None |
| 5,262,745 | Pulse Engineering, Inc. | Surface mounted multi-section bobbin | US | | 11/16/1993 | 1/27/2012 |
| 5,971,805 | Co-owned: Pulse Engineering, Inc. & Berg Inc. | Modular jack with filter insert | US | | 10/26/1999 | 5/27/2017 |
| 6,005,467 | Pulse Engineering, Inc. | Trimmable Inductor | US | | 12/21/1999 | 1/21/2008 |
| 6,181,777 | Pulse Engineering, Inc. | Impedance Blocking Filter Circuit | us | | 12/19/2006 | 11/19/2018 |
| 6,087,920 | Pulse Engineering, Inc. | Monolithic Inductor | US | | 7/11/2000 | 8/11/2008 |
| 6,087,921 | Pulse Engineering, Inc. | Placement Insensitive Monolithic Inductor And Method Of Manufacturing Same | US | | 7/11/2000 | 8/11/2008 |
| 6,193,560 | Co-owned: Pulse Engineering, Inc. & Tyco Inc. | Connector assembly with side- by-side terminal arrays | US | | 2/27/2001 | 3/3/2020 |
| 6,504,906 | Pulse Engineering, Inc. | Telephone Micro-tester & Signature Transport System | US | | 1/7/2003 | 2/7/2007 |
| 6,628,531 | Pulse Engineering, Inc. | Multi-Layer, User-Configurable Micro-Printed Circuit Board | US | CN, TW | 9/30/2003 | 1/24/2021 |
| 6,872,098 | Co-owned: Pulse Engineering, Inc. & Tyco Inc. | Modular jack assembly with signal conditioning | US | | 3/29/2005 | 7/31/2022 |
| 7,661,994 | Pulse Engineering, Inc. | Universal connector assembly and method of manufacturing | US | | 2/16/2010 | 5/5/2028 |
| 7,786,009 | Pulse Engineering, Inc. | Universal connector assembly and method of manufacturing | us | | 8/31/2010 | 2/15/2030 |
| 7,845,975 | Pulse Engineering, Inc. | Low-profile connector assembly and methods | US | CN, TW | 12/7/2010 | 1/29/2028 |
| 7,845,984 | Pulse Engineering, Inc. | Integrated 2x6 with POE controller "Backpack" | . US | , | 12/7/2010 | 6/30/2029 |
| 7,876,189 | Pulse Engineering, Inc. | Form-less Electronic device and methods of manufacture | US | CN | 1/25/2011 | 7/6/2024 |
| 7,942,700 | Pulse Engineering, Inc. | Modular electronic header assembly and methods of manufacture | US | TW | 5/17/2011 | 5/10/2030 |
| 7,959,473 | Pulse Engineering, Inc. | Universal connector assembly and method of manufacturing | us | | 6/14/2011 | 8/30/2030 |
| 7,982,572 | Pulse Engineering, Inc. | MicroTransformer MagPac | US | | 7/19/2011 | 7/15/2029 |
| RE40,020 | Pulse Engineering, Inc. | Impedance Blocking Filter Circuit | US | | 1/22/2008 | 11/19/2018 |
| RE41,145 | Pulse Engineering, Inc. | Impedance Blocking Filter Circuit | US | | 2/23/2010 | 11/19/2018 |
| RE41,164 | Pulse Engineering, Inc. | Impedance Blocking Filter Circuit | US | | 3/16/2010 | 10/22/2019 |

| | Trademark | Image | Application Number/ Application Date | Registration Number/ Registration Date | Class | Owner | Status/Remarks |
|-------------|-------------|------------|---|---|-----------|----------------------------------|---|
| Desig | Design Only | (3) | 85171998 | 1088559 05-May-2011 | 9, 42 | Pulse Electronics Corporation | Registration (Registered)/ International Registration designating: Australia, European Community, Japan, Norway, Russian Federation, Singapore and Switzerland. |
| Design | Design Only | B | 45-2011- 0001928 06-May-2011 | | 9, 42 | Pulse Electronics Corporation | Unpublished Application (Pending) |
| Design Only | ylu0 r | () | 85171998 08-Nov-2010 | | 9, 40, 42 | Pulse Electronics Corporation | Pending Intent To Use (Final Refusal Mailed |
| Design Only |) Only | (3) | 9437159 09-May-2011 | | თ | Pulse Electronics Corporation | Pending |
| Design Only |) Only | (3) | 9437158 09-May-2011 | | 42 | Pulse Electronics Corporation | Pending |
| Design Only | · Only | (3) | 100022555 06-May-2011 | | 9, 42 | Pulse Electronics Corporation | Pending |
| MAGPAC | PAC | MagPac | 85376672 20-Jul-2011 | | o | Pulse Electronics Corporation | Pending Intent To Use |

Page 1 of 5

| Country | Trademark | lmage | Application Number/ Application Date | Registration Number/ Registration Date | Class | Owner | Status/Remarks |
|-----------|----------------------|-------------------|---|---|-----------|----------------------------------|---|
| Intl Reg. | Pulse Electronics | Pulse | | 1086937 05-May-2011 | 9, 42 | Pulse Electronics Corporation | Registration (Registered)/ International Registration designating: Australia, European Community, Japan, Norway, Russian Federation, Singapore and Switzerland. |
| Korea | PULSE ELECTRONICS | Pulse | 45-2011- 0001929 06-May-2011 | | 9, 42 | Pulse Electronics Corporation | Unpublished Application (Pending) |
| USA | PULSE ELECTRONICS | Pulse Electronics | 85172007 08-Nov-2010 | | 9, 40, 42 | Pulse Electronics Corporation | Pending Intent To Use (Final Refusal Mailed |
| China | PULSE ELECTRONICS | Pulse Electronics | 9461086 13-May-2011 | | 40 | Pulse Electronics Corporation | Pending |
| Taiwan | PULSE ELECTRONICS | Pulse | 100022554 06-May-2011 | | 9, 42 | Pulse Electronics Corporation | Pending |
| USA | SIDEWINDER | Spewpoer . | 85291715 11-Apr-2011 | | o | Pulse Electronics Corporation | Published (Pending) Intent To Use |
| USA | EXCELSUS | ٠ | 75709982 20-May-1999 | 2432883 06-Mar-2001 | თ | Pulse Electronics, Inc. | Renewed (Registered) |

| Country | Trademark | Image | Application Number/ Application Date | Registration Number/ Registration Date | Class | Owner | Status/Remarks |
|-----------|-----------|---------|---|---|---------------|-------------------------|---|
| Intl Reg. | PULSE | | | 989855 29-Sep-2008 | 9, 10, 40, 42 | Pulse Electronics, Inc. | Registration (Registered)/ International Registration designating: Australia, China, European Community, Japan, Korea, Norway, Russian Federation, Singapore and Switzerland. (Total refusal in |
| Intl Reg. | Pulse | T Pulse | | 989856 29-Sep-2008 | 9, 10, 40, 42 | Pulse Electronics, Inc. | Registration (Registered) International Registration designating: Australia, China, European Community, Japan, Korea, Norway, Korea, Norway, Russian Federation, Singapore and Switzerland. (Total refusal in |
| USA | PULSE | T Pulse | 77434243 08-Nov-2010 | | 9, 10, 40, 42 | Pulse Electronics, Inc. | Pending Intent To Use Suspended |
| USA | PULSE | PULSE | 77434185 28-Mar-2008 | | 9, 10, 40, 42 | Pulse Electronics, Inc. | Pending Intent To Use Suspended |
| Taiwan | LARSEN | | 83049681 28-Jul-1994 | 682719 01-Jul-1995 | o | Pulse Engineering, Inc. | Registration (Registered) |

| Country | Trademark | Image | Application Number/ Application Date | Registration Number/ Registration Date | Class | Owner | Status/Remarks |
|---------|-----------------------------------|----------------------------|---|---|---------------|-------------------------|---|
| Denmark | PULSE | | VA 003814 2008 26-Sep-2008 | VR 001275 2009 04-May-2009 | 9, 10, 40, 42 | Pulse Electronics, Inc. | Registration (Registered) |
| USA | VALOR | | 74304761 13-Aug-1992 | 1803124 09-Nov-1993 | ത | Pulse Electronics, Inc. | Renewed (Registered) |
| USA | Z-BLOCKER | | 75706173 13-May-1999 | 2410114 05-Dec-2000 | ത | Pulse Electronics, Inc. | Renewed (Registered) |
| China | Design Only | | 3332174 10-Oct-2002 | 3332174 28-Oct-2003 | ത | Pulse Engineering, Inc. | Registration (Registered) |
| China | MGTOROID | MGTOROID | 3001706 23-Oct-2001 | 3001706 14-Feb-2003 | o | Pulse Engineering, Inc. | Registration (Registered) |
| China | PULSE | | 6097480 08-Jun-2007 | | ത | Pulse Engineering, Inc. | Unpublished Application (Pending) |
| China | YOUR BUILD TO PRINT PARTNER | YOUR BRILL-NO-TANT DATAFIE | 1947832 26-Feb-2001 | 1947832 07-Jan-2003 | 40 | Pulse Engineering, Inc. | Registration (Registered) |
| China | WEILI | WEIL! MAGNETICS | 1947843 26-Feb-2001 | 1947843 07-Jan-2003 | 40 | Pulse Engineering, Inc. | Registration (Registered) (To Be Abandoned) |
| USA | COPPERHEAD | | 74576554 21-Sep-1994 | 1921738 26-Sep-1995 | თ | Pulse Engineering, Inc. | ⊰enewed (Registered) |

| Registered |
|-------------------------------------|
| Pulse Electronics Corporation |
| 40 |
| 2441051 03-Apr-2001 |
| 76038699 02-May-2000 |
| |
| COMPONENTS FOR A MODERN WORLD |
| USA |
| |

RECORDED: 10/26/2011